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Impact of global warming on viral diseases: What is the evidence?

Author(s): Zell R, Krumbholz A, Wutzler P

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Abstract:

Global warming is believed to induce a gradual climate change. Hence, it was predicted that tropical insects might expand their habitats thereby transmitting pathogens to humans. Although this concept is a conclusive presumption, clear evidence is still lacking--at least for viral diseases. Epidemiological data indicate that seasonality of many diseases is further influenced by strong single weather events, interannual climate phenomena, and anthropogenic factors. So far, emergence of new diseases was unlinked to global warming. Re-emergence and dispersion of diseases was correlated with translocation of pathogen-infected vectors or hosts. Coupled ocean/atmosphere circulations and 'global change' that also includes shifting of demographic, social, and economical conditions are important drivers of viral disease variability whereas global warming at best contributes.

Source: http://dx.doi.org/10.1016/j.copbio.2008.10.009

Resource Description

Exposure: M

weather or climate related pathway by which climate change affects health

Ecosystem Changes, El Nino Southern Oscillation, Other Exposure

Other Exposure: sea surface temperature

Geographic Feature: M

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact: M

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Vectorborne Disease, Zoonotic Disease

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Vectorborne Disease: General Vectorborne

Zoonotic Disease: General Zoonotic Disease

Resource Type:

format or standard characteristic of resource

Review

Timescale: M

time period studied

Time Scale Unspecified